a side face at an opposite side to the side face where said first slit is provided is formed with a second slit which is parallel with an axial direction of said shaft,

one end part of said second slit is connected to a third slit which circles said shaft in a direction vertical to an axial direction of said shaft,

an end part of said third slit is provided on an extension of said first slit, and

each said shaft is attached by screws which pass through said first and second slits to screw holes which are provided in the housing segments at the two sides of said shaft.

4. The joining structure of a multi-segment housing according to claim **2**, wherein

each shaft is formed from a hollow cylindrical member,

one side face is formed with a first slit which is parallel with an axial direction of said shaft,

a side face at an opposite side to the side face where said first slit is provided is formed with a second slit which is parallel with an axial direction of said shaft,

one end part of said second slit is connected to a third slit which circles said shaft in a direction vertical to an axial direction of said shaft,

an end part of said third slit is provided on an extension of said first slit, and

each said shaft is attached by screws which pass through said first and second slits to screw holes which are provided in the housing segments at the two sides of said shaft.

5. The joining structure of a multi-segment housing according to claim **3**, wherein between a screw head of each screw and an inner circumferential surface of each shaft, a slide assist member is attached.

6. The joining structure of a multi-segment housing according to claim **4**, wherein between a screw head of each screw and an inner circumferential surface of each shaft, a slide assist member is attached.

7. The joining structure of a multi-segment housing according to claim **3**, wherein the lengths of said first and second slits and positions of the screw holes at said housing segments are lengths and positions where said shafts stick out by exactly the same lengths at the housing segments at the two sides when two facing housing segments are fully slid.

8. The joining structure of a multi-segment housing according to claim **4**, wherein the lengths of said first and second slits and positions of the screw holes at said housing segments are lengths and positions where said shafts stick out by exactly the same lengths at the housing segments at the two sides when two facing housing segments are fully slid.

9. The joining structure of a multi-segment housing according to claim **5**, wherein the lengths of said first and second slits and positions of the screw holes at said housing segments are lengths and positions where said shafts stick out by exactly the same lengths at the housing segments at the two sides when two facing housing segments are fully slid.

10. The joining structure of a multi-segment housing according to claim **6**, wherein the lengths of said first and second slits and positions of the screw holes at said housing segments are lengths and positions where said shafts stick out by exactly the same lengths at the housing segments at the two sides when two facing housing segments are fully slid.

11. The joining structure of a multi-segment housing according to claim **1**, wherein said shafts have built into them slide assist mechanisms which assist the forces in the slide directions right before said second and third housing segments finish sliding in directions closing and directions opening with respect to said first and fourth housing segments.

12. The joining structure of a multi-segment housing according to claim **11**, wherein

said slide assist mechanisms are provided with fixed mechanisms which are fixed at the housing segment side and moving mechanisms which move with respect to the housing segment,

said fixed mechanisms are provided with

grooves which are provided between said first and second housing segments and between said third and fourth housing segments,

mounting plates which attach said moving mechanisms to said first and third housing segments, and

brackets which hold shafts which are provided at said moving mechanisms to be able to slide with respect to said second and fourth housing segments,

said moving mechanisms are provided with

main bodies which move in said grooves in a state between the state where the housing segments are superposed and the state where they are fully slid,

recessed parts which are provided in said main bodies in long directions,

ring-shaped parts which are inserted in said recessed parts and move along the inner circumferential surfaces of the same,

first slide members of predetermined lengths which are provided at the inner circumference sides at positions which bisect the total lengths of said ring-shaped parts,

second slide members which are provided at the outer circumference side and which are provided with total lengths the same as said first slide members,

guide members which are provided at the insides of said ring-shaped parts of said recessed parts and which are provided with guide surfaces which face paths of movement of said first slide members across predetermined distances,

spacers which are provided at the outsides of said recessed parts and which enable movement of said second slide members,

recessed parts which are provided at the two sides of said guide surfaces and which face said first slide members when said first slide members are positioned the left end sides in said recessed parts and when they are positioned at the right end sides, and

assist spring members which have columnar elastic members which can expand and contract and endpiece members which are connected to the two end parts of said elastic members to be able to swivel and which have horizontal widths larger than the horizontal widths of said elastic members, which have one of said endpiece members engaged with one of said recessed parts when said first slide members are positioned at left end sides in said recessed parts and when they are positioned at right end sides, and which are arranged in said recessed parts so that said elastic members are housed in spaces between said first slide members and said guide surfaces and so that the other endpiece members are engaged with end parts of said first slide members,

inside the spaces, said shafts are provided with their two end parts supported at said main bodies,

mounting plates of said fixed mechanisms are fixed to said first slide members, and

said brackets hold said shafts to slide inside said spaces and are engaged with said second slide members so that the positional relationships with said second slide members do not change.